



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/844,920	04/26/2001	Erin H. Sibley	PD-201030A	2072

7590 10/19/2005

Hughes Electronics Corporation
Corporate Patents & Licensing
Bldg R11 Mail Station A109
P O Box 956
El Segundo, CA 90245-0956

EXAMINER

NGUYEN, THUAN T

ART UNIT PAPER NUMBER

2685

DATE MAILED: 10/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/844,920	SIBLEY ET AL.	
	Examiner	Art Unit	
	THUAN T. NGUYEN	2685	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-19 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fuller (U.S. Patent No. 5,729,297) in view of Hylton et al. (US Patent 5,708,961) and Wonfor et al (US patent 6,381,747 B1).

Regarding claim 1, Fuller discloses “a system of distributing electronic content” (Fig. 1) comprising: “a network operations center generating a broadcast signal having digital electronic content”, i.e., digital broadcast electronic content are stored in a distribution center 104 and an uplink facility 102 regarding as a network operations center generates a broadcast signal having digital electronic content or digital programming signals to a plurality of downlink facilities 108, 110 & 112 (Fuller, Fig. 1, and col. 8/line 64 to col. 9/line 1); “a communication backbone coupled to said network operations center”, i.e., a communication network 100 or communication backbone coupled to the network distribution facility 102 using satellite links (as

Art Unit: 2685

illustrated in Fig. 1, and col. 8/line 64 to col. 9/line 25); “a base station receiving said broadcast signal from said backbone and forming a wireless local area network”, i.e., a facility 108 serves as a base station in receiving the broadcast signal from the distribution network 100 (Fig. 2, and col. 9/lines 25-53); “said base station over-the air rebroadcasting at least a portion of said broadcast signal as a rebroadcast signal using said wireless local area network”, i.e., using a redistribution network 204 and a local area network 404 part of redistribution network 204, the facility 108 or base station 108 redistributes at least a portion of the broadcast signal to other user terminals 208 as a rebroadcast signal (Figs. 2 & 4, and col. 9/line 54 to col. 10/line 30 as a special-pay per-view program as a portion of the broadcast signal because not all users will receive all available programs, but they have to do a special order in receiving a part of available programs, and col. 13/line 57 to col. 14/line 25 for network 204 and a local area network 404); and a user appliance positioned with said local area network and receiving said rebroadcast signal, i.e., user appliance 210 coupled to terminal 208 within the local area network of distribution network 204 receives the rebroadcast signal over the air using RF signals (Fuller, Figs. 2 & 4, col. 9/line 54 to col. 10/line 30, and col. 10/lines 9-47 & col. 13/line 57 to col. 14/line 40).

Fuller does not address that Fuller’s system further specify the term “a wireless local area network” within that local area network as addressed but furthermore, in a same environment in receiving digital satellite broadcast services, Hylton further teaches that at the user terminal side or at the satellite data receiver within the receiving station comprising a group of terminals (as illustrated in Fig. 1), one can use a plurality of network interfaces within the satellite data receiver in order to communicate with other networks such as a wireless local area network or

Art Unit: 2685

wireless LAN (Fig. 1, and col. 4/line 54 to col. 5/line 11 & col. 8/line 5 to col. 9/line 44 for details of wireless DET 102 equipped with an antenna). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Fuller's technique of providing a local area network either for wireless or wireline for users to communicate to each other in a small local area network with Hylton's teaching technique of upgrading to a wireless local area network with the network interfaces as addressed in order to expand the capability of broadcast system in term of bandwidth and data rates in redistributing the broadcast signals or digital programming services to other networks such as a wireless LAN comprising wireless terminals or wireless devices as preferred.

Fuller and Hylton do not further address "said user appliance having conditional access software therein, said conditional access software allowing the user appliance to access the rebroadcast signal" as amended; however, such a technique of having a Conditional Access Module (CAM) and using conditional access software for allowing the user appliance to access the signal (or broadcasting/rebroadcasting service) is known in the art. In fact, Wonfor teaches an exact technique within the broadcasting system, the copyright and the user's access control is controlled by the broadcasting system, with a CAM module is installed in the user's appliance (set top box 10—see Fig. 3, which is also same as item CAM 79 in set top box 16 of Fig. 2 of the present application, and see col. 5/lines 15-23, col. 5/line 58 to col. 6/line 15 & col.6/lines 52-65). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Fuller and Hylton's system with a known feature as a CAM with conditional access software as taught by Wonfor in order to provide and control the user's access at ease based on the CPCS software protection imposed by the headend control system.

As for claim 2, in view of claim 1, Fuller further discloses comprising “a television coupled to said base station, said television receiving at least a portion of said rebroadcast signal”, i.e., a television 210 coupled to the base station or the facility 108 (Fig. 2), and a special-pay per-view program as a portion of the broadcast signal addressed because not all users will receive all available programs, but they have to do a special order in receiving a part of available programs (col. 9/line 54 to col. 10/line 30).

As for claim 3, in view of claim 1, Fuller discloses “wherein said base station forms said rebroadcast signal from said digital electronic content”, i.e., video server 202 within the facility 108 continually updates and selects programs for rebroadcasting to users based on their requests or commands and the programming is digital video programming signals from the distribution center 104 (col. 8/line 64 to col. 9/line 14, and col. 12/line 37 to col. 13/line 21).

As for claims 4 and 5, in view of claim 1, Fuller further discloses “wherein said electronic content comprises digital audio signals” and “wherein said electronic content comprises video”, i.e., digital video programming signals includes video and audio signals (col. 3/lines 15-29, col. 6/lines 27-40 & col. 7/lines 20-36 for an MPEG converter in handling digital video and digital audio signals).

As for claim 6, in view of claim 1, Fuller further discloses “wherein said backbone comprises a high altitude device, cable or fiber optic cable”, i.e., a satellite is a high altitude device (Fig. 1/item 106) and fiber optical cable or cable trunks can be used for distribution network 204 (col. 9/line 54 to col. 10/line 8).

As for claims 7 and 8, in view of claim 6, Fuller discloses “wherein said high altitude device comprises a satellite” and inherently discloses “wherein said high altitude device

Art Unit: 2685

comprises a stratospheric platform”, i.e., a satellite must be a high altitude device and in a stratospheric platform (Fig. 1/item 106; and as admitted without further details in section 0016 of the specifications).

As for claim 9, in view of claim 1, Fuller further discloses “wherein said base station comprises an integrated receiver decoder”, i.e., an integrated receiver decode IRD 200 is included within the facility 108 or referred to as the base station (Fig. 2/item 200, and col. 9/lines 25-35).

As for claim 10, in view of claim 1, Fuller further discloses “wherein said rebroadcast signal is compressed at the base station into a compressed signal”, i.e., signals being compresses in the compressed form of MPEG signals at the server regarding as the base station (Fig. 6, and col. 18/line 58 to col. 19/line 20).

As for claim 11, in view of claim 1, Fuller further discloses “wherein said backbone comprises a cable network” (col. 9/line 54 to col. 10/line 8, and col. 28/lines 29-52 as this technique is for use in cable television networks).

As for claim 12, in view of claim 1, Fuller further discloses “wherein said backbone comprises a fiber optic network” (col. 28/lines 29-52 as fiber optical cable transmission is included within the network).

Regarding claim 13, Fuller discloses “a method of distributing electronic content” (Fig. 1) comprising the steps of: “coupling electronic content to a redistribution device; receiving the electronic content from the redistribution device; over-the-air broadcasting at least a portion of the electronic content from the redistribution device”, i.e., digital broadcast electronic content are stored in a distribution center 104 and an uplink facility 102 generates a broadcast signal having

Art Unit: 2685

digital electronic content or digital programming signals broadcasting to a plurality of downlink facilities 108, 110 & 112 via satellite links as means for over-the-air coupling or broadcasting to redistribution device 108, 110 & 112, and these devices receive the electronic content or digital programming services (Fuller, Fig. 1, and col. 8/line 64 to col. 9/line 1), the distribution network 204 receives and transmits the rebroadcast signal over the air using RF signals (Fuller, Figs. 2 & 4, col. 9/line 54 to col. 10/line 30), and “receiving the over-the air broadcast electronic content through a user appliance”, i.e., the user at user appliance 210 receives the electronic content or digital programming using the RF system and the MATV system (Fig. 2, col. 9/line 54 to col.10/line 30 and col. 10/lines 13-30).

Applicants argue that Fuller’s network 204 does not provide wireless capability for users; however, such a technique is long taught by Hylton as Hylton teaches to provide a shared system or a base station that redistributing signals from digital broadband network to users and users with wireless devices DET 102 within a closed group of users can receive and communicate to the system interactively (Hylton, Fig. 1, and col. 4/line 54to col. 5/line 11). Therefore, it would have been obvious to one of ordinary skill in the art to modify or clarify the system of Fuller by using wireless local are network as suggested by Hylton for a local group of users within a building or an apartment in order to provide an enhanced system that flexibility in providing wireless services to users in a local area network as preferred.

Fuller and Hylton do not further address “said user appliance having conditional access software therein, said conditional access software allowing the user appliance to access the rebroadcast signal” as amended; however, such a technique of having a Conditional Access Module (CAM) and using conditional access software for allowing the user appliance to access

Art Unit: 2685

the signal (or broadcasting/rebroadcasting service) is known in the art. In fact, Wonfor teaches an exact technique within the broadcasting system, the copyright and the user's access control is controlled by the broadcasting system, with a CAM module is installed in the user's appliance (set top box 10—see Fig. 3, which is also same as item CAM 79 in set top box 16 of Fig. 2 of the present application, and see col. 5/lines 15-23, col. 5/line 58 to col. 6/line 15 & col.6/lines 52-65). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Fuller and Hylton's system with a known feature as a CAM with conditional access software as taught by Wonfor in order to provide and control the user's access at ease based on the CPCS software protection imposed by the headend control system.

As for claim 14, in further view of claim 13, Fuller further discloses "wherein the step of receiving over-the-air broadcasting comprises over-the-air broadcasting from a base station", i.e., Fuller suggests that system using RF signals and MATV system (master antenna TV) for transmitting and receiving electromagnetic waves broadcasting in spaces or over-the-air in addition to optical fiber cable (Fuller, col. 9/line 54 to col. 10/line 30); and refer to claim 13 above for wireless or over-the-air issue with the base station or processing system 10 of Hylton.

As for claim 15, in further view of claim 13 above, Fuller further discloses "wherein the step of over-the-air broadcasting comprises forming a local area network with the user appliance", i.e., over-the air broadcasting from satellite 106 down to a facility 108 (Fig. 2) forming a local area network 404 within the distribution network 204 with the user appliance 210 (Figs. 2 & 4, and col. 13/line 39 to col. 14/line 24 for LAN 404 addressed; and refer to claim 13 above for wireless or over-the-air issue for forming the local area network.

Regarding claim 16, the combination of Fuller and Hylton teaches “a method of distributing electronic content comprising the steps of: broadcasting a television signal as a electronic content; receiving the electronic content at a base station; digitally compressing the electronic content into a compressed signal at the base station; and over-the-air rebroadcasting the compressed signal using a wireless local area network” (see claim 1 above for the combined teaching of Fuller and Hylton, with a television signal as an electronic content addressed in Fuller’s, col. 3/lines 15-30 for cable television programming with video-on-demand broadcasting to TV users, and further in Fuller’s, col. 3/lines 39-54 for movies with digitally compressed delivering to TV set in customer’s room; and over-the-air issue concerned in Fuller, col. 9/line 54 to col. 10/line 36; and the teaching of Hylton for the wireless local area network for wireless set top devices within a local area network; and with the teaching of Wonfor for the conditional access software in claim 1 as well as the feature in claim 10 above).

As for claim 17, in view of claim 16 above, Fuller discloses “comprising the steps of receiving the compressed signal at a user appliance” (see col. 3/lines 39-54 for compressed signal delivered to customer’s TV set).

As for claim 18, in view of claim 16, Fuller further discloses “wherein the step of receiving comprises the steps of digitally decompressing the digital video stream, and displaying the video stream”, i.e., digital compressed video are encoded at video server and then later being decoded or decompressing, for instance, with an MPEG decoder, into an RF format or as baseband video signals that users can view on their display TV set (col. 4/lines 22-31 & col. 6/lines 15-27).

Regarding claim 19, Fuller discloses a base station (Fig. 2) comprising: a receiving antenna for receiving electronic content (antenna 108a for receiving electronic content from distribution center 102&104); compression software for compressing the electronic content into a compressed signal within the base station, i.e., a systems control computer 206 oversees the operation (Fuller, col. 9/lines 45-53) and uses MPEG converter 602 for encoding the electronic content into a compressed signal in MPEG formats (Fuller, Fig. 6, and col. 19/lines 20-65).

Fuller does not clearly further show the step of “a transmitting area network antenna; and a wireless local area network interface coupled to the transmitting area network antenna and broadcasting the compressed signal through the transmitting area network antenna as a rebroadcast signal”; however, in a same environment in receiving digital satellite broadcast services, Hylton further teaches that at the user terminal side or at the satellite data receiver within the receiving station comprising a group of terminals (as illustrated in Fig. 1), one can use a plurality of network interfaces within the satellite data receiver of the receiving station in order to communicate with other networks such as a wireless local area network or wireless LAN, or over-the-air broadcasting from that receiving base station (Hylton, Fig. 1 & claim 1 above). Furthermore, Hylton in a wireless on-premises video distribution system further teaches to include a base station broadcasting to a plurality of wireless devices uses a transmitting area network antenna 27 for providing video services to a plurality of terminals 100 with antennas 29 (Hylton, Fig. 1, and col. 8/lines 5-45). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Fuller’s technique of providing a local area network for users to communicate to each other in a small local network with the network interfaces together with a transmitting area network antenna at the base station

Art Unit: 2685

controller 10 as taught by Hylton, as a needed tool for communicating such as exchanges signaling messages between the controller 19 from the base station processing system 10 and terminals 100 as addressed in order to expand the capability of broadcast system in term of bandwidth and data rates in redistributing the broadcast signals or digital programming services to other networks such as a wireless LAN comprising wireless terminals or wireless devices as preferred.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Letellier et al (US Patent 6,543,050 B1) discloses a system using a CAM software.

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Art Unit: 2685

6. **Any response to this action should be mailed to:**
Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to the New Central Fax number:
(571) 273-8300, (for Technology Center 2600 only)

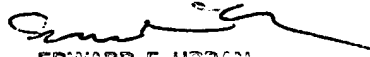
Hand deliveries must be made to Customer Service Window,
Randolph Building, 401 Dulany Street, Alexandria, VA 22314.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tony Thuan Nguyen whose telephone number is (571) 272-7895. The examiner can normally be reached on Monday-Friday from 9:30 AM to 7:00 PM, with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban, can be reached at (571) 272-7899.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tony T. Nguyen
Art Unit 2685
October 11, 2005


EDWARD F. URBAN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600